Patent claims

1.
A release mechanism between a projectile (1) and a rocket motor (10) in a missile, where the projectile (1) is released from the rocket motor (10) during the flight thereof when the rocket motor (10) is burned out and retardation occurs, characterised in that the rocket motor (10) in the front end thereof comprises a forward closure (7,7'), one in the forward closure (7,7') received and movable locking means retainer (2), at least one locking means (3), at least one spring means (6) that bias against the locking means retainer (2) in a direction opposite to the direction of motion for the missile, and that the projectile (1) in the rear end thereof has a central boss (4) surrounded by said forward closure (7,7') of the rocket motor (10), where the boss (4) comprises recesses or a circumferential groove (14) in which the at least one locking means (3) is lying and keeps the forward closure (7,7') and boss (4) axially together.

2.
A release mechanism according to claim 1, characterised in that the locking means (3) is in form of a ball.

3.
A release mechanism according to claim 1, characterised in that the locking means (3) is in form of a rod, a chip, a lug or button.

4.
A release mechanism according to any of the claims 1, 2 or 3, characterised in that the locking means retainer (2) is a retaining ring having continuous internal retainer race.

5.
A release mechanism according to claim 4, characterised in that the locking means retainer (2) is a ball retaining ring having continuous internal ball retainer race.

6.
A release mechanism according to any of the claims 1, 2 or 3, c h a r a c - t e r i s e d i n that the locking means retainer (2) has a number of separated, axially projecting retainers (16).

7.
A release mechanism according to claim 6, c h a r a c t e r i s e d i n that the locking means retainer (2) comprises an annular part (15) and a number of separated, axially projecting ball retainers (16).

8.
A release mechanism according to any of the claims 1-7, c h a r a c - t e r i s e d i n that the boss (4) is hollow cylindrical.

9.
A release mechanism according to any of the claims 1-8, c h a r a c - t e r i s e d i n that the forward closure (7,7') is assembled of a polar boss (7) and a forward motor closure (7') that are threaded together and with a seal (18) there between.

10.
A release mechanism according to any of the claims 1-9, c h a r a c - t e r i s e d i n that the projectile (1) is a penetrator.